

PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Patent Information Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 7

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 09/785,486        |
| Filing Date            | February 20, 2001 |
| First Named Inventor   | Shinji TAKEDA     |
| Art Unit               |                   |
| Examiner Name          | GRAYBILL, D.      |
| Attorney Docket Number | TM&K0008          |

**U. S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|----------|--|--------------------------------|--|---|
|                    |          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
| G                  | A        | US- 4,358,581                            | 11-09-1982                     | Sutton   |   |
|                    | B        | US- 4,543,295                            | 09-24-1985                     | St. Clair et al.                                   |   |
|                    | C        | US- 4,581,096                            | 04-08-1986                     | Sato   |   |
|                    | D        | US- 4,875,279                            | 10-24-1989                     | Sakiadis   |   |
|                    | E        | US- 4,933,219                            | 06-12-1990                     | Sakumoto et al.                                    |   |
|                    | F        | US- 4,985,105                            | 01-15-1991                     | Masuda   |   |
|                    | G        | US- 4,990,292                            | 02-05-1991                     | Hattori et al.                                     |   |
|                    | H        | US- 5,145,099                            | 09-08-1992                     | Wood et al.  |   |
|                    | I        | US- 5,177,032                            | 01-05-1993                     | Fogal et al.                                       |   |
|                    | J        | US- 5,204,399                            | 04-20-1993                     | Edelman  |   |
|                    | K        | US- 5,234,522                            | 08-10-1993                     | Suzuki et al.                                      |   |
|                    | L        | US- 5,238,730                            | 08-24-1993                     | Hanawa et al.                                      |   |
|                    | M        | US- 5,250,637                            | 10-05-1993                     | Shiobara et al.                                    |   |
|                    | N        | US- 5,277,972                            | 01-11-1994                     | Sakumoto et al.                                    |   |
|                    | O        | US- 5,319,005                            | 06-07-1994                     | Hagiwara et al.                                    |   |
|                    | P        | US- 5,360,942                            | 11-01-1994                     | Hoffman et al.                                     |   |
|                    | Q        | US- 5,432,380                            | 07-11-1995                     | Jin et al.   |   |
|                    | R        | US- 5,476,908                            | 12-19-1995                     | Kishi et al.                                       |   |
|                    | S        | US- 5,512,628                            | 04-30-1996                     | Sakumoto et al.                                    |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. | Foreign Patent Document                                 | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>4</sup> |
|--------------------|----------|---|--------------------------------|--|---|----------------|
|                    |          | Country Code* Number* Kind Code <sup>3</sup> (if known) |                                |  |   |                |
| G                  | T        | EP-285051   | 10-05-1988                     | DuPont   |   |                |
|                    | U        | EP-618614   | 10-05-1994                     | Hitachi Chem.                                      |   |                |
|                    | V        | EP-775716   | 05-28-1997                     | Kanegafuchi Kagaku Kogyo                           |   |                |
|                    | W        | EP-0271736-A1   | 06-22-1988                     | Nippon Steel Chemical Co.                          |   |                |
|                    | X        | EP-0837498-A1   | 04-22-1998                     | Hitachi Chem.                                      |   |                |
| G                  | Y        | JP-6326240  | 11-25-1994                     | Hitachi Cable                                      |   |                |

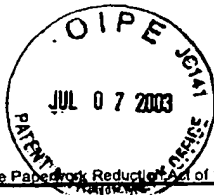
Examiner  
SignatureDate  
Considered

7-26-3

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (04-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 7

### Complete if Known

|                        |                   |
|------------------------|-------------------|
| Application Number     | 09/785,486        |
| Filing Date            | February 20, 2001 |
| First Named Inventor   | Shinji TAKEDA     |
| Art Unit               |                   |
| Examiner Name          | GRAYBILL, D.      |
| Attorney Docket Number | TM&K0008          |

### U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
| G                  | Z                     | US- 5,528,075                            | 06-18-1996                     | Burns  |   |
|                    | AA                    | US- 5,635,009                            | 06-03-1997                     | Kawamura et al.                                    |   |
|                    | AB                    | US- 5,659,004                            | 08-19-1997                     | Takigawa et al.                                    |   |
|                    | AC                    | US- 5,728,473                            | 03-17-1998                     | Inoue et al.                                       |   |
|                    | AD                    | US- 5,739,099                            | 04-14-1998                     | Welch et al.                                       |   |
|                    | AE                    | US- 5,827,908                            | 10-27-1998                     | Arai et al.  |   |
|                    | AF                    | US- 5,837,368                            | 11-17-1998                     | Hiroe et al.                                       |   |
|                    | AG                    | US- 6,046,072                            | 04-04-2000                     | Matsuura et al.                                    |   |
|                    | AH                    | US- 6,097,089                            | 08-01-2000                     | Gaku, et al.                                       |   |
|                    | AI                    | US- 6,099,678                            | 08-08-2000                     | Kotato et al.                                      |   |
|                    | AJ                    | US- 6,248,613                            | 06-19-2001                     | Matsuura et al.                                    |   |
|                    | AK                    | US- 6,299,513                            | 10-09-2001                     | Tsuihiji et al.                                    |   |
|                    | AL                    | US- 6,372,080                            | 04-16-2002                     | Matsuura et al.                                    |   |
|                    | AM                    | US- 2001/0015484-A1                      | 08-23-2001                     | Matsuura et al.                                    |   |
|                    | AN                    | US- 5,667,899                            | 09-16-1997                     | Yusa et al.  |   |
|                    |                       | US-                                      |                                |  |   |
|                    |                       | US-                                      |                                |  |   |
|                    |                       | US-                                      |                                |  |   |
|                    |                       | US-                                      |                                |  |   |

### FOREIGN PATENT DOCUMENTS

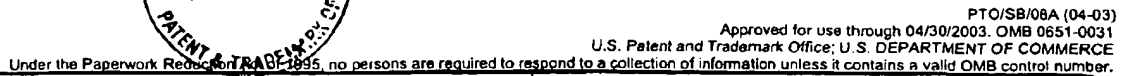
| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>8</sup> |
|--------------------|-----------------------|---|--------------------------------|--|---|----------------|
|                    |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |  |   |                |
| G                  | AO                    | JP-3215014  | 09-20-1991                     | Seiko Instr.                                       |   |                |
|                    | AP                    | JP-02-256251  | 10-17-1990                     | Matusushita  |   |                |
|                    | AQ                    | JP-06-326240  | 11-25-1994                     | Hitachi Cable                                      |   |                |
|                    | AR                    | JP-1-165635   | 11-20-1989                     | NEC Corp.  |   |                |
| G                  | AS                    | JP-3-228  | 01-07-1991                     | HITACHI CABLE                                      |   |                |

|                    |            |                 |         |
|--------------------|------------|-----------------|---------|
| Examiner Signature | <i>gms</i> | Date Considered | 9-26-03 |
|--------------------|------------|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>8</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



*(Use as many sheets as necessary)*

|       |   |    |   |
|-------|---|----|---|
| Sheet | 3 | of | 7 |
|-------|---|----|---|

|                        |                   |
|------------------------|-------------------|
| Application Number     | 09/785,486        |
| Filing Date            | February 20, 2001 |
| First Named Inventor   | Shinji TAKEDA     |
| Art Unit               |                   |
| Examiner Name          | GRAYBILL, D.      |
| Attorney Docket Number | TM&K0008          |

| FOREIGN PATENT DOCUMENTS |          |   |                                |  |   |                |
|--------------------------|----------|---|--------------------------------|--|---|----------------|
| Examiner Initials*       | Cite No. | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>o</sup> |
|                          |          | Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>6</sup> (if known) |                                |  |   |                |
| G                        | AT       | JP-5-125337   | 05-21-1993                     | SUMITOMO BAKELI                                    |   |                |
|                          | AU       | JP-5-152355   | 06-18-1993                     | NITTO DENKO CO                                     |   |                |
|                          | AV       | JP-5-152386   | 06-18-1993                     | SUMITOMO METAL                                     |   |                |
|                          | AW       | JP-5-152466   | 06-18-1993                     | SHIN ETSU CHEM                                     |   |                |
| G                        | AX       | JP-5-335379   | 12-17-1993                     | TORAY IND INC                                      |   |                |

|                       |            |                    |        |
|-----------------------|------------|--------------------|--------|
| Examiner<br>Signature | <i>Jhr</i> | Date<br>Considered | 9-26-3 |
|-----------------------|------------|--------------------|--------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

|       |   |    |   |
|-------|---|----|---|
| Sheet | 4 | of | 7 |
|-------|---|----|---|

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 09/785,486        |
| Filing Date            | February 20, 2001 |
| First Named Inventor   | Shinji TAKEDA     |
| Art Unit               |                   |
| Examiner Name          | GRAYBILL, D.      |
| Attorney Docket Number | TM&K0008          |

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

| FOREIGN PATENT DOCUMENTS |                       |   |                                |  |   |                |
|--------------------------|-----------------------|---|--------------------------------|--|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>2</sup> |
|                          |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |  |   |                |
| Q                        | AY                    | JP-54-12266   | 01-29-1979                     | Mitsubishi Elec                                    |   |                |
|                          | AZ                    | JP-54-138371  | 10-26-1979                     | NEC HOME ELECTR                                    |   |                |
|                          | BA                    | JP-58-222530  | 12-24-1983                     | HITACHI LTD  |   |                |
|                          | BB                    | JP-58-57730   | 04-06-1983                     | NISSHA PRINTING                                    |   |                |
|                          | BC                    | JP-60-145630  | 08-01-1985                     | NEC CORP   |   |                |
| 12                       | BD                    | JP-60-38825   | 02-28-1985                     | SUMITOMO METAL                                     |   |                |

Examiner  
Signature

9/11/18

|            |  |
|------------|--|
| Date       |  |
| Considered |  |

9-26-5

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**



Substitute for form 1449/PTO

*(Use as many sheets as necessary)*


|       |   |    |   |
|-------|---|----|---|
| Sheet | 5 | of | 7 |
|-------|---|----|---|

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 09/785,486        |
| Filing Date            | February 20, 2001 |
| First Named Inventor   | Shinji TAKEDA     |
| Art Unit               |                   |
| Examiner Name          | GRAYBILL, D.      |
| Attorney Docket Number | TM&K0008          |

[illegible]

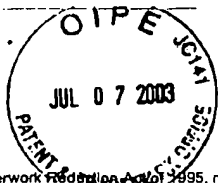
| FOREIGN PATENT DOCUMENTS |                       |   |                  |   |   |                |
|--------------------------|-----------------------|---|------------------|---|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | f <sup>6</sup> |
|                          |                       | Country Code <sup>2</sup> Number* Kind Code <sup>3</sup> (if known) | MM-DD-YYYY       |   |   |                |
| G                        | BE                    | JP-6-104300   | 04-15-1994       | FUJITSU LTD                                     |   |                |
|                          | BF                    | JP-62-141038  | 09-05-1987       | Irokawa   |   |                |
|                          | BG                    | JP-64-19735   | 06-12-1990       | Tomeogawa Paper                                 |   |                |
|                          | BH                    | JP-64-22744   | 02-06-1989       | Kansai NEC Corp                                 |   |                |
| H                        | BI                    | JP-7-90239  | 04-04-1995       | SUMITOMO BAKELI                                 |   |                |

|                       |   |                    |        |
|-----------------------|---|--------------------|--------|
| Examiner<br>Signature |  | Date<br>Considered | 9-26-3 |
|-----------------------|---|--------------------|--------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

*If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*



PTO/SB/088 (04-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Project of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|   |      |                          |                   |
|---|------|--------------------------|-------------------|
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(Use as many sheets as necessary) |      | <b>Compleat if Known</b> |                   |
|   |      | Application Number       | 09/785,486        |
|   |      | Filing Dat               | February 20, 2001 |
|   |      | First Named Inventor     | Shinji TAKEDA     |
|   |      | Art Unit                 |                   |
|   |      | Examiner Name            | GRAYBILL, D.      |
| Sheet 6   | of 7 | Attorney Docket Number   | TM&K0008          |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
| A                               | BK                    | "Rubber Elastomer Utility Notes", relates to types of rubber and their chemical structure and properties, July 20, 1991   |                |
| I                               | BL                    | Notice of Reason for Refusal for Japanese Appln. No. 2000-346979 mailed on 10/22/2002 (with English Translation)  | ✓              |
| I                               | BM                    | Opposition against Japanese Patent No. 3187400  |                |
| I                               | BN                    | Opposition against Japanese Patent No. 3215014  |                |
| G                               | BO                    | European Search Report dated July 15, 2002  |                |
|                                 |                       |   |                |
| A                               | BQ                    | Notice of Reason for Refusal for Japanese Appln. No. 7-173493 mailed on August 29, 2000 (with English Translation)  | ✓              |
| I                               | BR                    | Notice of Reason for Refusal for Japanese Appln. No. 2000-156125 mailed on September 19, 2000 (with English Translation)  | ✓              |
| I                               | BS                    | Opposition against Japanese Patent No. 3117966  |                |
| A                               | BT                    | Property list, Plastic Reader (1987 15th edition)   |                |

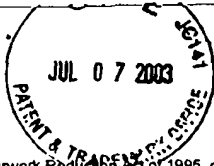
|                    |             |                 |         |
|--------------------|-------------|-----------------|---------|
| Examiner Signature | <i>John</i> | Date Considered | 9-26-03 |
|--------------------|-------------|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (04-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

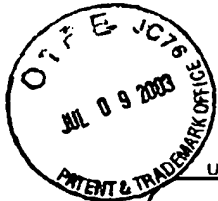
|   |      |                          |                   |
|---|------|--------------------------|-------------------|
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(Use as many sheets as necessary) |      | <b>Complete if Known</b> |                   |
|   |      | Application Number       | 09/785,486        |
|   |      | Filing Date              | February 20, 2001 |
|   |      | First Named Inventor     | Shinji TAKEDA     |
|   |      | Art Unit                 |                   |
|   |      | Examiner Name            | GRAYBILL, D.      |
| Sheet 7   | of 7 | Attorney Docket Number   | TM&K0008          |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
| Gr                              | BU                    | International Search Report mailed April 2, 1996 for International Application PCT/JP95/02691   |                |
|                                 | BV                    | European Search Report dated March 31, 2003 in European application 03001585.3  |                |
|                                 | BW                    | European Search Report dated December 10, 1998  |                |
| Gr                              | BX                    | European Search Report dated October 28, 1998 in European application EP96922225  |                |
|                                 |                       |   |                |
|                                 |                       |   |                |
|                                 |                       |   |                |
|                                 |                       |   |                |
|                                 |                       |   |                |
|                                 |                       |   |                |
|                                 |                       |   |                |

|                    |  |                 |         |
|--------------------|--|-----------------|---------|
| Examiner Signature |  | Date Considered | 9-26-03 |
|--------------------|--|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (04-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|   |                          |                   |
|---|--------------------------|-------------------|
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) | <b>Complete if Known</b> |                   |
|   | Application Number       | 09/785,486        |
|   | Filing Date              | February 20, 2001 |
|   | First Named Inventor     | Shinji TAKEDA     |
|   | Art Unit                 | 2827              |
|   | Examiner Name            | GRAYBILL, D.      |
| Attorney Docket Number  | TM&K0008                 |                   |

Sheet 1 of 1

| U. S. PATENT DOCUMENTS |          |  |                                |  |   |
|------------------------|----------|--|--------------------------------|--|---|
| Examiner Initials*     | Cite No. | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                        |          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
| G                      | A        | US- 5,793,099                            | 08-11-1998                     | Murakami et al.                                    |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |
|                        |          | US-                                      |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                       |   |                                |   |   |                |
|--------------------------|-----------------------|---|--------------------------------|---|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T <sup>6</sup> |
|                          |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   |                |
|                          |                       |   |                                |   |   | </             |

|                    |  |                 |         |
|--------------------|--|-----------------|---------|
| Examiner Signature |  | Date Considered | 9-26-03 |
|--------------------|--|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.